FAX NO.

142943



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20480 LAN 2 6 1999

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

Stephen Hammond, Director
Division of Solid & Hazardous Materials
New York State Department of Environmental
Conservation
50 Wolf Road, Room 488
Albany, New York 12233-7250

Dear Mr. Hammond:

Thank you for your letter of November 19, 1998 concerning whether several processes used to decharacterize D018 coal tar wastes at manufactured gas plant (MGP) sites in New York State are permissible under the current Land Disposal Restrictions (LDR) program. You present two basic scenarios that involve various mixing processes, each of which raise a number of considerations under current federal regulations and policies. We are pleased to provide you with an explanation of how our federal LDR regulations and policies might pertain. However, as you are aware, authorized states are granted the authority and responsibility to make those types of regulatory interpretations and policies themselves so long as the outcome is no less stringent than the federal program would otherwise be. Thus, New York State is ultimately the appropriate regulatory authority for making any final determination on a site-specific basis.

Your first question is whether it is acceptable to mix D018 MGP waste, or soil containing the same, with carbon and/coal fines provided that the material is subsequently permanently treated in a thermal destruction device. Under federal law, we would view this practice as permissible assuming that this form of pre-treatment enhances the treatment of the material in a combustion unit (e.g., utility boiler). Mixing with earbon and/or coal fines effects a physical change to the waste stream that makes the waste more amenable to combustion, a form of treatment that removes and destroys the hazardous organic constituents. See the enclosed memorandum from Sylvia Lowrance, OSW Director, to EPA Regional Waste Management Division Directors on the Remediation of Historic Manufactured Gas Plant Sites, dated April 26, 1993.

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Your second question is whether it is acceptable to add soil, either in the area of contamination or in tanks/containers, to D018 MGP waste or soil containing the same. The soil would decharacterize the material and allow the mixed material to be transported to an off-site, non-RCRA C facility for subsequent thermal destruction complying with LDR treatment standards. In addressing this question, the specifics of each situation are key to making any final determination on the acceptability and appropriateness of these practices. Again, the authorized state is in the best position to make these judgments, particularly in a remedial context.

From the federal perspective, once a hazardous, contaminated soil has been "generated" and becomes subject to LDR treatment standards, dilution of that soil solely as a substitute for adequate treatment to achieve compliance with LDR treatment standards is considered impermissible dilution, and is prohibited under 40 CFR §268.3. In addition, under federal regulations, D018 MGP waste may not be deliberately mixed with soil solely to change its treatment classification, that is from a waste to a contaminated soil. If this were done, the resulting material would continue to be subject to the LDR standards for the original hazardous waste classification of D018.

However, various aspects of soil mixing at remediation sites have been recognized by the Agency as allowable under our federal program. For example, if the mixing occurs through the normal consolidation of contaminated soil from various portions of a site that typically occurs during the course of remedial activities or in the course of normal earthmoving and grading activities, the Agency does not consider this to be intentional mixing of soil with non-hazardous soil for the purposes of evading LDR treatment standards. Therefore, this is not viewed by us as a form of impermissible dilution. See 63 FR 28605 and 28621 (May 26, 1998). Indeed, if a contaminated soil is consolidated within an area of contamination before it is removed from the land (i.e., generated), the determination as to whether the soil exhibits a characteristic of hazardous waste may be made after such consolidation. If the soil is determined not to be hazardous when removed, neither Subtitle C nor the land disposal restriction requirements would apply. This point is made in my August 21, 1998 letter to William Weissman, which you referenced in your letter.

The Agency also recognizes that some situations may require soil mixing, as part of a pre-treatment process, to facilitate and ensure proper operation of the final treatment technology to meet the LDR treatment standards. For example, addition of less contaminated soil may be needed to adjust the contaminated soil BTU value, water content, or other properties to facilitate treatment. These adjustments would be for meeting the energy or other technical requirements of the treatment unit to ensure its proper operation. The Agency views this type of pre-treatment step as allowable provided the added reagents or other materials produce chemical or physical changes and do not (1) merely dilute the hazardous constituents into a larger volume of waste so as to lower the constituent concentration or (2) release excessive amounts of hazardous constituents to the air. If the mixing or other pre-treatment is necessary to facilitate proper treatment in meeting the LDR standards, then dilution is permissible. See 51 FR 40592 (November 7, 1986) and 53 FR 30911 (August 16, 1988).

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NHDES, WASTE MOMT DIV

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I hope that this provides you with sufficient information to proceed with your site-specific decision making regarding remediation of MGP wasto sites in New York State. As you know, we are encouraging these clean-ups to be done as quickly and effectively as possible, and we appreciate your efforts in this important environmental protection effort. If you have any further questions, please feel free to contact me directly at (703) 308-8895, or your staff may contact Rita Chow of our Waste Treatment Branch at (703) 308-6158.

Sincerely,

Elizabeth A. Cotsworth

Acting Director

Office of Solid Waste

Enclosure (1)

PPC 9441.1996(03)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

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May 30, 1996

Mr. William E. O'Brien Manager of Business Operations Carboplus, Incorporated 101 Federal Street, Suite 1900 Boston, Massachusetts 02110

Dear Mr. O'Brien:

Thank you for your letter of February 28, 1996, in which you asked about the status of your mixed coal products. Based on your conversation with Mr. Ron Josephson of my staff, you wanted to know more specifically about mixing Manufactured Gas Plant (MGP) wastes with coal and selling the mixed material to coke ovens or power plants.

In 1993, the Agency reviewed a submission by the Edison Electric Institute (EEI) in which a strategy was devised for remediation of MGP sites (sent to you under separate cover). Basically, MGP wastes, if characteristically hazardous according to 40 CFR 261 Subpart C, may be mixed with coal or other material (such as wood chips, corn cobs, etc.) on site in a tank, container, or containment building within 90 days until the characteristic is removed. At that point, the mixed material may be sent to a power plant or other facility that burns primarily fossil fuels assuming it no longer is characteristically hazardous as defined by 40 CFR 261 Subpart C. The residues from combustion of fossil fuels are generally exempt from the hazardous waste regulations under 40 CFR 261.4(b)(4). If, instead, the mixed material is sent to a landfill, all the Land Disposal Restrictions (LDR) standards must be met notwithstanding that the characteristic has been removed. The Agency determined at the time that this strategy would help speed up the remediation of MGP sites. This memo is still the Agency's policy on the subject.

Please be aware that the Agency's Superfund program is working on a presumptive remedy strategy for MGP sites which will present to the public options for cleanup of these sites. You should also contact the applicable state environmental agency to determine if your technology is allowed under state law. Some states provide stricter interpretations of Federal law, and you may not be able to apply your technology to MGP sites in those states. Please remember that if the coal or the mixture is mixed with a listed hazardous waste as defined by 40 CFR 261 Subpart D, the entire mixture becomes hazardous waste subject to all applicable requirements.

Thank you for your inquiry. If you have any additional questions on the MGP policy, please contact Ron Josephson at (703)308-0442 or at josephson.ron@epamail.epa.gov. If you have questions on fossil fuel combustion, please contact Mr. Van Housman at (703)308-8419.

Sincerely,

Michael H. Shapiro, Director Office of Solid Waste

Attachment

CARBOPLUS, INC. 101 Federal Street Suite 1900 Boston, Massachusetts 02110 Tel: (617) 342-7396 Fax: (617) 342-7080 Mobile Phone: (617) 584-9157

February 28, 1996

Mr. Michael Shapiro
Office of Solid Waste
United States Environmental Protection Agency
Room 5301
401 M Street, S.W.
Washington, D.C. 20460

Re: Determination of mixing technology

Dear Mr. Shapiro:

BOOZ-ALLEN & HAMILTON, INC.

I received your name from Kristin Tensuan at the RICRA hotline who suggested that I write you. We are attempting to receive a ruling or an opinion that our mixed coal products are not hazardous wastes.

Carboplus, Inc. is marketing a technology for waste removal that has been successfully used in Europe. In this process, coal is batched with burnable hazardous wastes to produce customized fuels capable of being burned in industrial furnaces. We wish to use this technology to clean up MGP and NPL sites.

We realize that it will be difficult to provide a global answer to this question as coal can be mixed with many items. Nonetheless, we hope that you can provide us with a definition of coal and a determination of how mixed coal products are classified.

In closing, I thank you for your assistance in this matter. Please call me under the number provided above if you have any questions or comments.

Very truly yours,

William E. O'Brien Manager of Business Operations

cc: Herr Kamperhoff